

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 472/1 PCT	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/DE2004/000999	International filing date (day/month/year) 13.05.2004	Priority date (day/month/year) 24.06.2003
International Patent Classification (IPC) or national classification and IPC		
Applicant KOUSEMAKER, Michiel, Arjaan		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☒ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/000999

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-9 _____ as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-8 _____ received by this Authority on 06.04.2005 with letter of 05.04.2005
- nos.* _____ received by this Authority on _____
- ☐ the drawings:
- sheets _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☒ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☒ the claims, nos. 1 _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/000999

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims 6, 7

YES

Claims 1-5, 8

NO

Inventive step (IS)

Claims

YES

Claims 1-8

NO

Industrial applicability (IA)

Claims 1-8

YES

Claims

NO

2. Citations and explanations (Rule 70.7)

2. Reference is made to the following document:

D1: EP-A-0 718 270

3. The present application does not meet the requirements of PCT Article 33(1) because the subject matter of claims 1-5 and 8 lacks novelty (PCT Article 33(2)). Document D1 (see the passages cited in the international search report) discloses a method for producing polyol ethers. In examples 4 and 10, glycerol is reacted with isobutene in the presence of acetone on acid catalysts. D1 uses, *inter alia*, acetalisation (2,2-dimethyl-4 hydroxymethyl-1,3-dioxolan can be detected in the reaction mixture) and etherification of acetal to produce 2,2-dimethyl-4-tert-butoxymethyl-1,3-dioxolan. Use of the reaction product as fuel additive for petrol is also disclosed. D1 thus prejudices the novelty of claims 1-5 and 8.

3. It is not clear which of the additional features from claims 6 and 7, insofar as they can be

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/000999

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

understood (see Box VIII), could support an inventive step. The problem of interest is clearly solved in D1, since it uses the same starting substances as those which are specified in the claims to which claims 6 and 7 refer back or which are disclosed in the examples of the international application (PCT Article 33(3)).

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/DE2004/000999

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

4. Claims 6 and 7 do not meet the requirements of PCT Article 6 because the subject matter for which protection is sought is not clearly defined. The claims attempt to define the subject matter by the result to be achieved; thus only the problem to be solved is defined, without indicating the method features needed to achieve that result, which must include, in addition to the choice of starting substances, for example the reaction and processing conditions. In claim 6, the result to be achieved is also unclear, since the application does not explain what is meant by a "negative influence" on the flash point.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box I**Basis of the report**

1. The amendments submitted with the letter of 5 April 2005 introduce substantive matter which, contrary to PCT Article 34(2)(b), goes beyond the disclosure in the international application as filed. The amendment in question is the addition to claim 1, which states that in reaction stage b) an isolated acetal is used which was produced in reaction step a). The use of an isolated intermediate product involves the additional step of processing (isolating) the reaction mixture of reaction stage a). There is no general disclosure relating to this in the originally filed application. A special isolation method (filtration, followed by fractionated distillation) is disclosed only in the single embodiment, which discloses a specific combination of reactants, which lead to a specific intermediate product. Apart from this specific disclosure, the originally filed application does not contain any general teaching regarding the isolation of the intermediate product of step a) prior to carrying out stage b).